Beyond PD-L1: novel PD-1 biomarkers identified by driving T cell dysfunction in vitro

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Agenus VISION Platform
Integrated discovery & development platform designs concepts to clinic

T cell dysfunction system drives CD8+ T cells to dysfunction through chronic cancer antigen exposure

VVISION PLATFORM PROVIDES CLINICAL INSIGHTS
VVISION T cell dysfunction signature correlates with Objective Response Rate in anti-PD1/PDL1 treatment

VVISION PLATFORM DEFINES RATIONAL COMBINATIONS
Single cell transcriptomics of T cells during early dysfunction identifies T cell subsets that respond to anti-PD1

Conclusions
- Agenus’ VISION platform combines deep in vitro profiling and AI-based approaches to predict clinical outcomes, plus rational targets & combinations.
- We defined a predictive biomarker signature that outperforms standard PD-L1 IHC.
- We identified a potential mechanism underlying the effective combination of anti-PD1 and anti-TIGIT antibodies in the clinic.

References:
- Rizzi A et al., Tumor and Microenvironment Evolution during Immunotherapy with CheckMate.
- Hughes et al., Genomic and Transcriptional Features of Response to Anti-PD-1 Therapy in a Human Tumor Xenograft.
- Nihal M et al., Comparison of PD-1/PD-L1 expression and T cell subsets is crucial in informing the selection of immunotherapies.
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